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Effect of Taijiquan on Lumbar Back Fasciitis

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Keywords: Tai Chi Exercise Therapy, Back Muscle Fasciitis, Efficacy Observation, Suspension Exercise

Abstract: This article aims to study the application of Tai Chi exercise therapy to the treatment of lumbar back muscle fasciitis, which is an important topic at present. In this article, patients with back muscle fasciitis of all ages are taken as the research object. The experimental group selects 60 patients, 30 males and 30 females; the youngest is 19 years old and the maximum is 68 years old; the comparison group selects 60 patients and 30 males. There were 30 females; the youngest was 18 years old, the oldest was 67 years old, the shortest course was 10 days, and the longest was 3 years. First use mathematical statistics to analyze the effect of Taijiquan on the treatment of lumbar back muscle fasciitis; use a single variable method to compare the efficacy of Taijiquan on the treatment of lumbar back muscle fasciitis and view the efficacy of lumbar back muscle fasciitis; then the data Statistical methods were used for statistical analysis. Warm wine outside treatment method, can walking method, suspension exercise, meridian stab method, Taijiquan exercise treatment were used to check the efficacy of lumbar back muscle fasciitis. Finally, observe the various treatment methods The healing effect of different ages. According to this experimental study, the Taijiquan exercise is "a unity of man and nature, which is natural," and it is a good way to effectively prevent lumbar muscle strain. The effect of treating lumbar back muscle fasciitis is 98.66%. The method is simple, economical and practical.

1. Introduction

Taijiquan is a kind of exercise therapy for the treatment of lumbar back myofascitis. Taiji master Wu Yuxiang pointed out that Taijiquan must be "dominated by the waist", that is, Taijiquan movement should be centered on the waist, and the waist should be rotated through the left and right sides of the waist The spine drives the flexion, extension, rotation, and expansion of the limbs to form a winding motion around the waist, which will have different pulling, squeezing and

stimulating effects on the acupoints of the waist and the whole body. This is equivalent to a self-massage. The waist is fluent in operation, the kidneys are becoming more and more full, and the veins are exercised accordingly to achieve the effect of strengthening the kidney and strengthening the waist. Taijiquan moves intentionally and intentionally moves with the movement, thereby driving the qi and blood to run in harmony. The means is to make qi and blood circulate throughout the body through continuous changes in the real and the imaginary.

Rodrigues believes that the development and health of children are strictly dependent on a variety of factors, such as physical activity, proper nutrition, and vitally healthy psychology, such as Tai Chi [1]. Li explored the intervention effect and mechanism of Taijiquan on atherosclerosis in the elderly in 16 weeks. Methods: Twenty-seven elderly people, with an average age of 62 years, participated in the 16-week Taijiquan exercise program, 60 minutes each time, 6 times a week [2].

2. Programs Method

2.1. Therapeutic Effect of Taijiquan on the Human Body

Taijiquan originated from Chenjiagou in Wenxian County, Henan Province. Based on the ancestral boxing method of Chen Ninth, Chen Wangting combined with the classics of Yijing, traditional Chinese medicine meridian theory and guided tuna, a set of yin and yang created by the masters of a hundred schools Combined, dynamic and static, rigid and soft, and internal and external boxing [3-4]. Its unique martial arts method makes Taijiquan unique in Chinese martial arts, and its fusion of TCM meridian theory and guided tuna also sets it apart. Modern medicine also proves that practicing Tai Chi has a unique effect on human physical health.

2.1.1. The Effect of Taijiquan on the Human Nervous System

Taijiquan belongs to internal boxing, which is different from the fierce and rapid movement of external boxing. Taijiquan requires loose, quiet, gentle, and soft during the practice. This practice requires moderate tension in the brain, which is beneficial to improve nerve Sensitivity of the system: Force, mind dominates the movement of the limbs [5]. Under the influence of ideas, the nervous system always focuses on the accuracy of each movement, and some movements of Taijiquan are more complicated, requiring the coordination and cooperation of hands, feet, eyes, and body skills. In the process of continuous proficiency, you can activate the function of the nervous system and various organs of the body, and strengthen the regulating effect of the brain on the limbs. With the continuous improvement of the ability of the body's organ systems to coordinate with each other, the balance and flexibility of the nervous system have also been continuously strengthened. This makes the speed and accuracy of information transmitted by the nervous system also improved, thereby improving the function of the human nervous system, and the health care function of the nervous system by Taijiquan is well reflected.

2.1.2. The Effect of Taijiquan on the Human Respiratory System

Traditional Chinese medicine says: "The lungs are bound to one hundred pulses, one breath to one hundred pulses are all combined, one breath is one hundred pulses to open, one breath to one's body, all diseases are eliminated." This shows the importance of breathing to human health [6]. Guided tuna in Chinese medicine is a wellness technique invented by ancient Chinese medical scientists. It mainly uses breathing, pitching, flexion and extension of hands, feet, and other physical movements to make the blood flow in all parts of the body unobstructed, thereby promoting the body's In health, Chen Wangting incorporated the ancient technique of guided tuna

into Taijiquan when he created Taijiquan. Practicing Taijiquan requires "Qi Shen Dan Tian". Abdominal breathing (mostly inverse abdominal breathing) is adopted. Compared with chest breathing, abdominal breathing increases the range of motion of diaphragm muscles. It has greatly improved, which is conducive to breathing more fresh air and expelling more exhaust gas from the body, increasing the oxygen content in the blood, and promoting the body's metabolism. In addition, the breathing needs to be fine, uniform, deep, and long, which is conducive to the residence time of oxygen in the body and makes the utilization of oxygen more fully. This requirement is consistent with modern sports physiology [7]. It is a more scientific, Reasonable breathing.

2.1.3. The Role of Taijiquan

Taijiquan requires meditation and natural breathing during practice, that is, the practice of boxing requires a quiet and focused mind, focused attention to guide the movement, no excessive distractions, stable breathing, deep and natural; Taijiquan's movements are also Zhongzheng ease, soft and slow, that is, During the exercise, keep your body relaxed and natural, impartial, and move gently and gently [8-9]. It is this characteristic of Taijiquan that people can often calm down quickly when practicing Taijiquan. The whole body and mind are in a relaxed state, which makes people's emotions reach a psychological balance and maintains a subtle unity with nature [10-11]. Therefore, practicing Taijiquan for a long time can make one cultivate self-cultivation, be gentle, be kind to others, and feel good. In the fast-paced life of modern society, people often live in a stressful environment. Practicing Taijiquan has a more pronounced effect on the regulation of modern human nature.

2.1.4. The Effect of Taijiquan on the Human Body's Functional System

"Every movement is without movement, and every silence is with you" Tai Chi is a coordinated and coordinated movement of the whole body, and there are strict requirements for each part. Practicing Taijiquan requires "standing upright," "hanging the head, and closing the tail", that is, Baihui and Perineum are in a straight line. This will not only dredge qi and blood, but also avoid bowing the cat's waist and spinal atrophy. Taijiquan is different from the non-stop movement of foreign boxing. Every action of Taijiquan is entangled, draws an arc, and requires the action to be left first, right to open, close first, and upper and lower. The hand, eye, and footwork also require coordination and coordination. . Thus, the reverse regulation function of the human brain is effectively enhanced. Promote the development of overall coordination and balance of human movements, and overcome the shortcomings of long-term one-way movement caused by depression; practicing Taijiquan requires that you run through the whole body, and make a figure-eight convolute winding movement driven by the lumbar spine joints, so that The shoulders, elbows, knees, hips, ankles, and wrist joints have been fully exercised. Therefore, regular practice of Taijiquan can improve the functions of the body's joints, ligaments, and soft tissues, prevent the degradation of joint ligaments, and improve the working capacity of muscles. Taijiquan pays attention to the conversion of reality and reality. Through continuous transformation of the reality and reality of the legs, it can increase the strength of the legs and increase the elasticity of the arch of the foot, so that people can walk more lightly and vigorously.

2.1.5. The Effect of Taijiquan on the Digestive System

Practicing Taijiquan requires the top of the tongue to prolong the tongue, which is beneficial to the secretion of saliva. Saliva contains a large amount of salivary amylase and immunoglobulins, which are beneficial to the human body, and have the effect of promoting digestion and sterilization;

Taiji The first uses reverse abdominal breathing, deep and long breathing [12-14]. It increases the amplitude of the diaphragm and abdominal muscles, and has a good massage effect on the human organs, such as the stomach and intestines, enhances the peristalsis of the stomach and intestines, facilitates the secretion of digestive juice, and promotes the improvement of human digestion and absorption.

2.2. Causes and Clinical Manifestations of Lumbar Back Muscle Fasciitis

2.2.1. Reasons for Back Muscle Fasciitis

Lumbar back muscle fasciitis refers to a series of clinical symptoms that occur due to cold, humidity, and improper exercise that cause edema, exudation, and fibrosis of the back muscle fascia and muscle tissue.

The cause of lower back muscle fasciitis is due to insufficient strength or unreasonable training arrangements, resulting in excessive burden on the lower back, which is gradually strained [15]. Or the treatment is not completely prematurely put into training after acute injury and it is changed into chronic injury. In addition, cold, vitamin E deficiency, congenital malformations of the spine structure and so on are susceptible to this disease. Its pathological changes are various, including chronic inflammatory changes in the tissue structure of muscle and tendon attachment, fascia, nerves, blood vessels and fat.

2.2.2. Clinic of Back Muscle Fasciitis

The main manifestation is diffuse blunt pain in the lower back, especially in both sides of the lumbar muscles and above the diaphragm. Local pain, chills, numbness of the skin, muscle spasms and dyskinesias. Pain is characterized by: pain in the morning, light in the day, regaining weight in the evening, prolonged inactivity or excessive activity can induce pain, a long course of disease, and attacks due to fatigue and climate change. On examination, it can be seen that the back muscles increase in tension, the muscles between the scapula, the sides of the lumbar spine and the buttocks can be tender and can touch the hard cable, the spinous process can touch the indurated or swollen bar bricks, 2 ~ 4 lumbar vertebra process The tender points of patellar muscle can be touched, and the spinous processes can be misaligned. The pain can be radiated to the buttocks and lower limbs when the pain points near the spinous process and the buttocks are pressed.

2.2.3. Prevention and Treatment of Lower Back Muscle Fasciitis

Back muscle fasciitis usually does not require surgery. Acute lumbar back muscle fasciitis can have natural remission and recurrent tendencies, bed rest can be reduced, and fatigue and exacerbations can worsen. After bed rest, lumbar and back brakes, anti-inflammatory and analgesic drugs, physical therapy, closure and other treatments, most patients can quickly relieve their pain. Usually, the symptoms can be significantly reduced after 2 to 3 days, and the symptoms disappear within 1 to 2 weeks without leaving sequelae. Patients who have been converted to chronic back muscle fasciitis because they have not been thoroughly treated in the acute stage, except for appropriate rest, oral and topical anti-inflammatory and analgesic drugs, physical therapy, massage techniques (rolling method, palm rubbing method, shoulder movement method) , Compression method) in addition to treatment, you can also take the following exercise therapy as an auxiliary means:

1) Prone with both heads: prone on the bed, holding hands behind each other. Press your head, neck, chest, and legs at the same time to raise your upper body and lower limbs at the same time,

and keep them as far away from the bed as possible. Take a break after restoring and do it 15-20 times.

2) Holding the knees supine: Supine, inhale, bend your legs, lift your knees as close as possible to the abdomen, hold your knees tightly with both hands, and stretch your lower back muscles as far as possible. Resume after a few seconds, repeat 15 to 20 times.

3) Slumped back: kneeling on the bed with both knees and hands, looking up at the front, the waist collapsed. Inhale, bow your shoulders, and arch your waist. After staying for a few seconds, exhaling, raising his head, his waist collapsed. Repeat 10 to 15 times. 4. Support the waist and bend back: stand upright with your feet apart and shoulder width, support your waist with both hands, inhale, and stretch your back. Exhale and slowly lower your upper body to the maximum. Inhale, slowly raise your head, lean back, to the maximum, repeat 15 to 20 times.

2.2.4. Prevention of Back Muscle Fasciitis

Although lumbar back muscle fasciitis is a common sports injury, through effective preventive measures, the probability of its occurrence can be greatly reduced. This is commonly referred to as "prevention-based".

1) Be prepared for sports or strenuous activities. Especially before strength exercises and high-intensity special exercises, be sure to fully move the waist and back joints and muscles, not directly on high-intensity.

2) Strengthen the training of lower back and abdominal muscles, and wear soft protective gear during training.

3) Strengthen the flexibility of waist and back.

4) Cultivate self-control and self-protection awareness. Once waist injury is found, it is necessary to reduce the weight, stop training or change the practice site and method, and strengthen the diagnosis and treatment to avoid chronic injury caused by multiple injuries in the same site.

5) Change clothes immediately after exercise, and pay attention to protection. At the same time, the waist and back muscles should be stretched, massaged and heated.

6) Technical movements should be correct and reasonable. Try to avoid movements beyond the functional range of the spine.

7) It is necessary to control the exercise load and prevent the sports injury caused by the partial burden on the lower back.

3. Experiments

3.1. Experimental Settings

3.1.1. Experimental Background

Sports lumbar back muscle fasciitis refers to athletes contracting or being stretched after long-term heavy muscle exercise to cause inflammatory changes in the soft tissues of the back and back fascia, leading to fibrotic lesions in the muscle group. Back pain and soreness are clinically reported. Local muscle stiffening, sometimes induration or cords, are the main manifestations. Most of the pain caused by this cause occurs in sports athletes. In this experiment, Taijiquan exercise therapy was used to treat 60 cases of lower back muscle fasciitis, and it was compared with 60 cases of ordinary treatment.

3.1.2. Experimental Setup Process

This group selected 60 patients, including 30 males and 30 females; the youngest was 19 years old and the largest was 68 years; the comparison group was selected by 60 patients, 30 males and 30 females; the youngest was 18 years old and the largest was 67 years old. The shortest course was 10 days and the longest was 3 years. According to the experimental phenomenon, record the various data and use the Excel software owned by the computer to perform data statistics. The analysis of variance and comparison of data use SPSS19.0 analysis software One-way ANOVA program. The results of the data are expressed in the form of average values. .

3.2. Experimental Steps

(1) A total of 60 patients were selected, and Taijiquan exercise was used to observe the efficacy of lumbar back muscle fasciitis.

(2) A total of 120 patients were selected, and the efficacy of Taijiquan exercise therapy was compared with that of ordinary therapy.

(3) A total of 120 patients were selected and treated with warm wine external treatment method, walking tank method, suspension exercise, meridian stabbing method, and Taijiquan exercise. The efficacy of lumbar back muscle fasciitis was observed.

(4) A total of 120 patients were selected, and the treatment of lumbar back muscle fasciitis was performed using warm wine outside treatment, can walking method, suspension exercise, meridian stabbing method, and Taijiquan exercise according to the detection between different age groups. Observed.

3.3. Diagnostic Criteria

(1) There may be a history of improper treatment, strain or exogenous wind and cold after trauma.

(2) It is more common in the elderly, and it occurs between the shoulder blades, especially in manual laborers.

(3) Pain in the lower back, muscle stiffness, and a heavy feeling. Pain is often related to changes in the weather. It can worsen the symptoms after rainy days and fatigue.

(4) There is a fixed tenderness point on the lower back or the tenderness is more extensive. Lumbar and back muscles are stiff, and the cord-like changes are often palpable along the walking direction of the iliac spine. Most of the functional activities of the back are normal. X-ray examination showed no positive signs.

4. The Discussion

4.1. Effectiveness of Taijiquan in the Treatment of Low Back Muscle asciitis

(1) In this experiment, Taijiquan exercise was used in 60 patients to observe the efficacy of lumbar back muscle fasciitis. The data shows that in each age group, Taijiquan exercise therapy has a very obvious effect on lumbar back muscle fasciitis, and the general effect has reached 98.66%; among them, the effect is most significant among adolescents, which basically reaches 100. % Of treatment effect, the main reason is that adolescents have faster metabolism and faster recovery than other ages. This age is the peak period of growth and development. Physical functions can be restored quickly. The use of Taijiquan can make the waist Dorsalis fasciitis can have significant effects; other age groups, such as 25-40 years old and 41-55 years old. Its data collection table is

shown in Table 1 and Figure 1.

Table 1. Treatment effects of Taijiquan at different ages (unit:%)

Generation	First group	Second Group	Third group	Fourth group	Fifth group
18-25	100	99.89	99.99	99.23	100
25-40	98.32	97.32	98.57	99.11	96.43
41-55	96.53	98.35	98.46	97.75	98.32
56-68	98.34	98.46	97.73	98.82	98.52

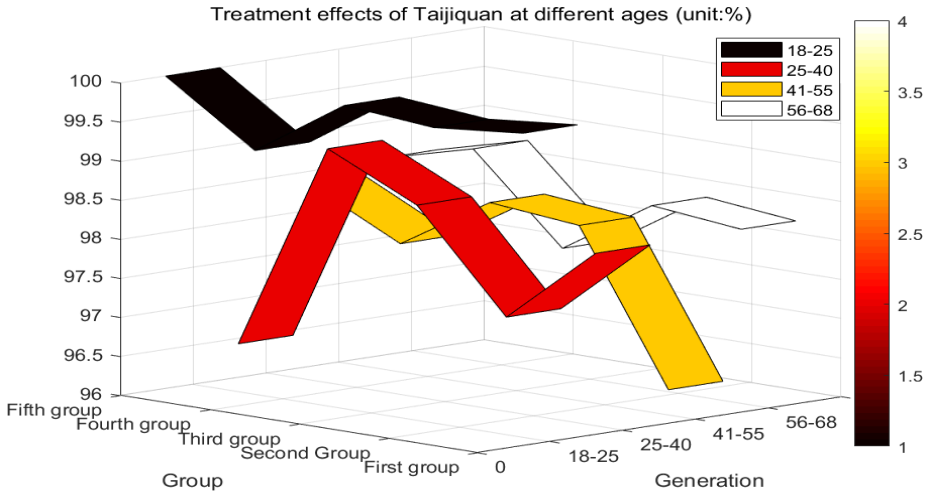

Figure 1. Treatment effects of Taijiquan at different ages (unit:%)

(2) A total of 120 patients were selected in this experiment. Taijiquan exercise treatment was compared with ordinary treatment to see the effect of lumbar back muscle fasciitis. The data shows that at different ages, two different treatment schemes are used. There is a clear comparison in the values. After the general use of Taijiquan treatment schemes, the treatment effect reached 98.99%, and the lumbar and back muscles after ordinary treatment methods were used. As far as the effect of fasciitis is only about 29.88%. Among them, Taijiquan has the most significant effect on the treatment of low back muscle fasciitis among the younger age group. Secondly, the healing effect of the upper age group is also obvious. The main reason is that the elderly have more time to use Taijiquan treatment methods. At the same time exercise movement standard, increase its therapeutic effect. The data collection table is shown in Table 2 and Figure 2.

Table 2. Comparison of the effects of the two treatments(unit:%)

Generation	First group		Second Group		Third group		Fourth group		Fifth group	
	Tai Chi	Normal	Tai Chi	Normal	Tai Chi	Normal	Tai Chi	Normal	Tai Chi	Normal
18-25	100	38.6	99.89	29.58	99.99	29.38	99.23	29.88	100	30.98
25-40	98.32	39.28	97.32	30.28	98.57	28.88	99.11	28.75	96.43	31.38
41-55	96.53	37.44	98.35	31.38	98.46	29.93	97.75	26.84	98.32	30.84
56-68	98.34	38.09	98.46	32.27	97.73	27.38	98.82	28.37	98.52	30.76

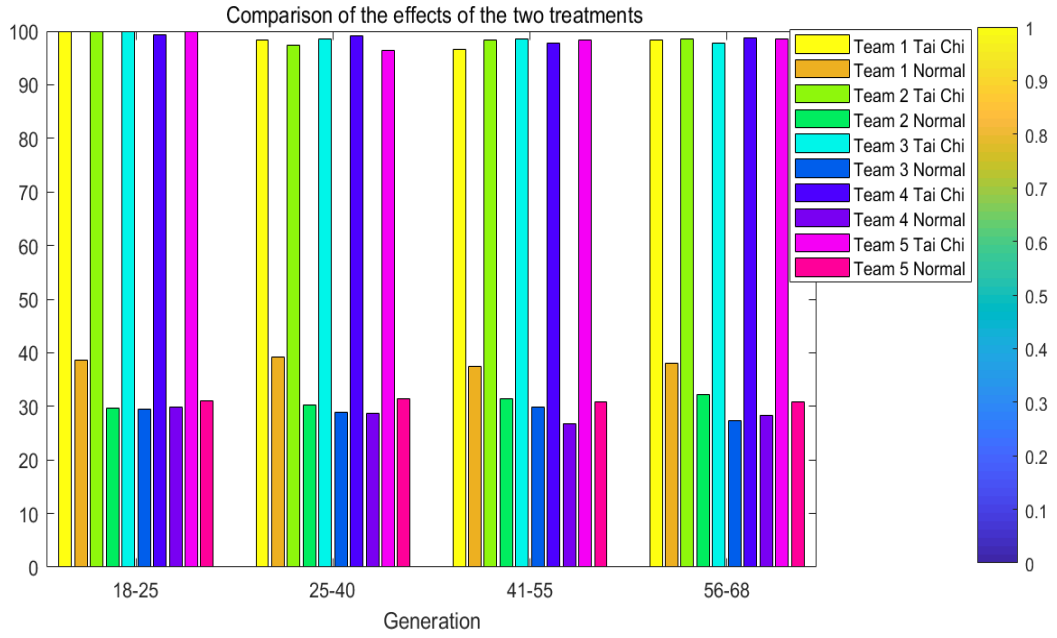

Figure 2. Comparison of the effects of the two treatments(unit:%)

4.2. Comparative Results of Using Taijiquan to Treat Low Back Muscle Fasciitis

(1) A total of 120 patients were selected for this experiment, and the treatment of lumbar back muscle fasciitis was observed using warm wine external treatment method, walking tank method, suspension exercise, meridian stab method, Taijiquan exercise treatment. The data shows that after using warm wine outside treatment, can walking method, suspension exercise, meridian stabbing method, and Taijiquan exercise, the effect of Taijiquan exercise is the most obvious, reaching 99.88%, while other treatment methods are suspended. The cure rate of hanging exercise therapy is high. The reason is that hanging exercise therapy combined with plucked meridian tendon therapy can effectively alleviate myofascitis of the back and back, prevent back muscle spasm, and improve the range of motion of the joints of the back. It is also a treatment. Safe and effective method for lower back fasciitis. The other treatments had good results, which were 65.78%, 58.76%, and 54.76%, respectively. The data collection table is shown in Table 3 and Figure 3.

Table 3. Effects of different treatments (Unit:%)

Group	Warm wine	Tank walking	Suspension movement	Meridian	Tai Chi Exercise Therapy
First group	66.65	57.49	77.32	55.34	99.89
Second Group	66.47	58.49	78.34	56.35	97.32
Third group	65.38	57.38	76.49	54.53	98.35
Fourth group	67.22	57.63	78.22	55.92	98.46

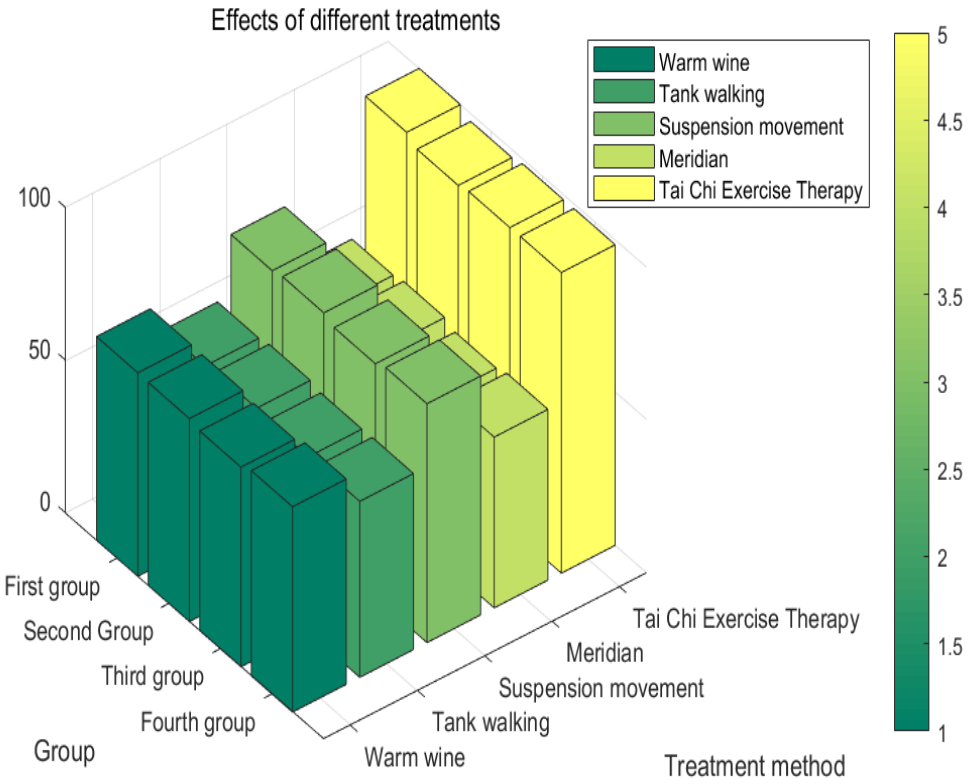

Figure 3. Effects of different treatments (Unit:%)

(2) A total of 120 patients were selected for this experiment. According to the detection between different age groups, warm wine treatment, can walking method, suspension exercise, meridian stabbing method, and Taijiquan exercise were used to check back muscle fasciitis Effect observation. The data shows that in different ages, the five methods of warm wine outside treatment, can walking method, suspension exercise, meridian stabbing method, and Taijiquan therapy are also the most obvious effects of Taijiquan therapy, although It has different effect values at different ages, but it is also significantly higher than other treatment methods. This is because Tai Chi exercise therapy is more accessible and cost-effective than other methods in terms of operating time and money, so it is widely accepted. Patients with back muscle fasciitis love it. The data collection table is shown in Table 4 and Figure 4.

Table 4. Effects of treatments at different ages

Group	Warm wine	Tank walking	Suspension movement	Meridian	Tai Chi Exercise Therapy
18-25	66.65	57.49	77.32	55.34	99.89
25-40	62.34	54.24	72.42	53.74	97.32
41-55	63.42	55.84	73.24	51.33	98.35
56-68	65.32	57.21	75.34	52.33	98.46

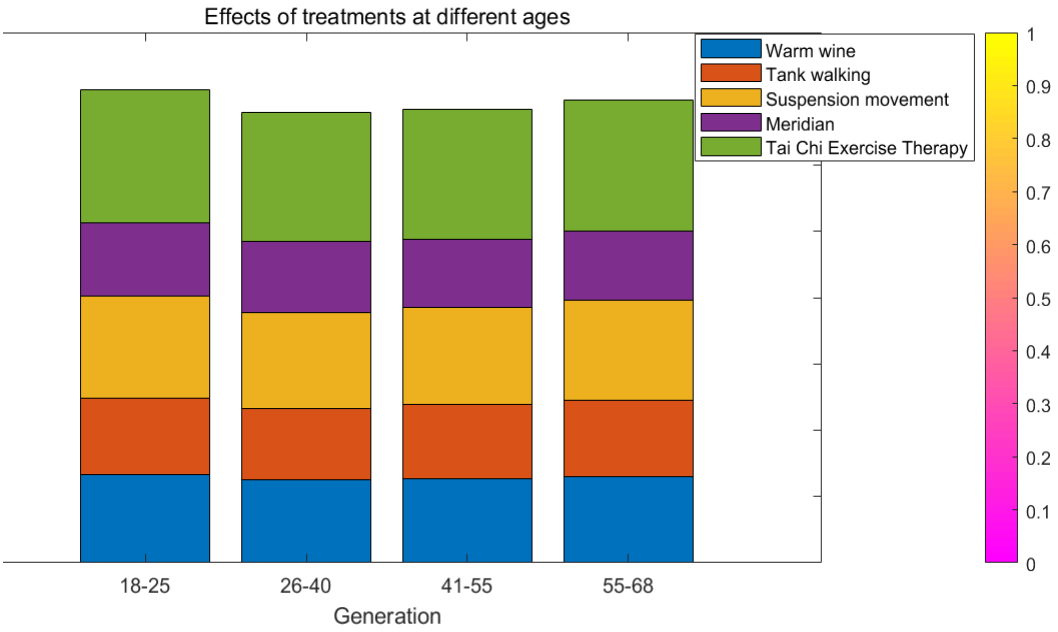

Figure 4. Effects of treatments at different ages

5. Conclusion

(1) Taijiquan exercise therapy combined with plucked meridian tendon therapy for the treatment of lumbar back muscle fasciitis has obvious advantages compared with traditional exercise therapy. By plucking the meridian tendons, not only the core muscles of the lower back can be activated, but also the channels and meridians can be cleared. Reduce the production and release of inflammatory mediators and promote the resolution of inflammation.

(2) Qi and blood circulate throughout the body, speeding up the blood circulation of the lower back, ensuring blood supply to the muscles and fascia of the lower back, regulating the metabolism of the lower back, and helping to repair the soft tissue of the lower back. Taijiquan requires coherent movements and roundness, and the whole body runs through it. It is also a good way to clear the muscles and fascia joints throughout the body. Therefore, practicing Taijiquan is the age of science and technology today. Therapy, Taijiquan can not only be used for fitness, but also be used to treat diseases of the lower back. As a hobby sport in life, why not?

(3) Modern medicine believes that lumbar back muscle fasciitis is a kind of low-back muscles, fascia, tendons, ligaments and other soft tissues. Due to long-term cumulative strain, or exogenous wind and cold, aseptic inflammation occurs, causing blood supply and The excretion disorder of the metabolites, compresses the nerve endings and causes pain, and over time, muscle adhesions and cords are formed, which causes chronic pain. This article aims to study the application of Tai Chi exercise therapy to the treatment of lumbar back muscle fasciitis, which is an important topic at present. In this article, patients with back muscle fasciitis of all ages are taken as the research object. The experimental group selects 60 patients, 30 males and 30 females; the youngest is 19 years old and the maximum is 68 years old; the comparison group selects 60 patients and 30 males. There were 30 females; the youngest was 18 years old, the oldest was 67 years old, the shortest course was 10 days, and the longest was 3 years. First use mathematical statistics to analyze the effect of Taijiquan on the treatment of lumbar back muscle fasciitis; use a single variable method to compare the efficacy of Taijiquan on the treatment of lumbar back muscle fasciitis and view the efficacy of

lumbar back muscle fasciitis; then the data Statistical methods were used for statistical analysis. Warm wine outside treatment method, can walking method, suspension exercise, meridian stab method, Taijiquan exercise treatment were used to check the efficacy of lumbar back muscle fasciitis. Finally, observe the various treatment methods The healing effect of different ages. Experimental data show that Taijiquan exercise has a very obvious effect on back muscle fasciitis, and the general effect has reached 98.66%; the use of Taijiquan exercise is significantly better than ordinary treatment; after comparing multiple treatment methods, Taijiquan exercise treatment method is obviously better than other treatment methods, and it is also obviously due to other treatment methods at different ages. According to this experimental study, the Taijiquan exercise is "a unity of man and nature, which is natural," and it is a good way to effectively prevent lumbar muscle strain. The effect of treating lumbar back muscle fasciitis is 98.66%. The method is simple, economical and practical.

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Data Availability

Data sharing is not applicable to this article as no new data were created or analysed in this study.

Conflict of Interest

The author states that this article has no conflict of interest.

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